

DuPont™ 959G-2XX Industrial Nonstick Coatings

Product Information

DuPont™ industrial coatings 959G-2XX are solvent based, one coat, finishes designed for use under moderate abrasion and where nonstick properties contribute to product performance. These nonstick finishes are designed for moderate cure temperature and the coatings can also be used as primers.

Property Data

Product Code	One Coat 959G-203	One Coat 959G-204	One Coat 959G-205
Properties¹			
Color	Black	Green	Dark Brown
Coverage, ² m ² /kg (ft ² /gal)	7.7 (319)	8.3 (351)	7.9 (336)
Viscosity, ³ centipoises	800 – 1200	800 – 1200	800 – 1200
Volume Solids, %	16.0 – 18.0	16.3 – 18.3	16.4 – 18.4
Weight Solids, %	23.0 – 26.0	26.5 – 29.5	26.3 – 29.3
Density, kg/l (lbs/gal)	1.02 (8.57)	1.04 (8.69)	1.04 (8.72)
Maximum In-Use Temperature, °C (°F)	220 (425)	220 (425)	220 (425)
Shipping Class	-100L	-100L	-100L
Food Contact Compliance	YES	NO	YES

¹ Physical constants are averages only and are not to be used as product specifications. They may vary up to 5% of the values shown

² Theoretical coverage at dry film thickness (DFT) of 1.0 mils (25μ) based on 100% application efficiency. It does not take normal production losses into account

³ Brookfield RVT (Measured with spindle 2 at 20 RPM/25 °C)



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Application Method

Substrate	Any metal substrate except high copper containing alloys
Substrate Preparation	Degreasing, gritblasting is recommended, but not required. Pre-bake metal 15 min. at 343 °C (650 °F). Apply over clean, roughened surface. Application to food contact approved conversion coatings is suggested where grit blasting is not practical. Any residual oil on the surface will affect the color of the cured film and will adversely affect adhesion.
Coating Preparation	Stir well before use. Roll or mix with a propeller-type mixer until contents are homogeneous.
Filtering	Strain through 150-mesh wire screen or cheese cloth.
Application	Use conventional industrial spray equipment. Agitate during use of sprayed from a pressure pot. Manual or Automatic Spray: No reduction required. If lower viscosity is desired, reduce with TN-8595, NMP or MIBK.
Recommended DFT	Film Thickness 15–30 µm (0.6–1.2 mil) DFT per coat. These products are recoatable. Maximum DFT in multiple coats: 64 µm (2.5 mil).
Curing (Metal Temperature)	One Coat System Flash dry in air 1–5 min. prior to bake. Note: If humidity is 85% or above, do not air flash. Instead, place in oven immediately to minimize absorption of moisture which may cause pinholes and water blisters. Bake 15 min. at 150 °C (300 °F), followed by 15 min. at 345 °C (650 °F) Multiple Coats For dry film builds greater than 30 µm (1.2 mil), bake initial coat and any intermediate coats: 15 min. at 150 °C (300 °F) Final bake: 15 min. at 345 °C (650 °F)
Clean up	TN-8595
Thinner/Additive	TN-8595


All recommendations are based upon best knowledge

Handling and Storage *

- Storage life is 18 months maximum at room temperature.
- Storage temperature 18–27 °C.
- Roll for 30 minutes at 30 RPM once per month.
- Warm containers to room temperature and roll completely before use.
- Solvent-based product
- For medical application and development, please consult DuPont.

Food Contact

959G-203 and 959G-205 coatings are designed to be used in direct contact with food. Applied according to the below application method and instructions, the fully cured coating will comply with US FDA food contact regulations, 21.CFR, and can be sold and/or used for food contact applications for nonstick coatings in Europe following the national legislations of each European country, having specific regulations for this category of coatings (nonstick, high temperature resistant).



Any changes or variations of individual coating thickness from what is indicated in this fact sheet should be assessed for food contact applications prior to its use. For details and information please contact your DuPont representative.

- Incinerate only if incinerator operates at 800 °C or higher and is capable of scrubbing out hydrogen fluoride and other acidic combustion products.
- Industrial fluoropolymer waste containing additives such as solvents, primers or thinners must be regarded as special waste. Companies should contact their local waste disposal authorities for details of the relevant waste disposal regulations.
- Empty containers should preferably be cleaned and recycled. If this is not possible, the containers should be punctured or otherwise destroyed before disposal.

For detailed information on health and safety, refer to the Material Safety Data Sheet and the latest edition of "The Guide to the Safe Handling of Fluoropolymer Resins," published by The Society of the Plastics Industry, Inc. (www.fluoropolymers.org) or by PlasticsEurope (www.plasticseurope.org).

959G-204 is NOT food contact compliant in the United States.

Disposal and Other Considerations

Please follow these guidelines as outlined in the " Safety Handling Guidelines for Fluoropolymers."

For disposal, please follow these guidelines:

- All treatment, storage, transportation, and disposal of this product and/or container must be in accordance with applicable national and local regulations.
- Do not discharge aqueous dispersions to lakes, streams or waterways.
- Separate solids from liquid by precipitation and decanting or filtering. Dispose of dry solids in a landfill that is permitted, licensed or registered to manage industrial solid waste. Discharge liquid filtrate to a wastewater treatment system.

For more information on
DuPont Industrial Nonstick Coatings, please visit
www.teflon.com/industrialglobalsupport

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CAUTION: Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also visit www.teflon.com/industrial to download a copy of the DuPont POLICY Regarding Medical Applications H-50103 and DuPont CAUTION Regarding Medical Applications H-50102.



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